

EXHIBIT 1

DECEMBER 2008

CURRICULUM VITAE

I. PERSONAL

Christopher Cox, Ph. D.
422 Hoffman Road
Harleysville, PA 19438
(267) 210-3474

II. EDUCATION

Johns Hopkins University, Baltimore, MD 1999
Organic Chemistry Ph. D.

Towson State University, Towson, MD 1994
Chemistry B. S. Summa Cum Laude

III MERCK/MRL EMPLOYMENT HISTORY

Medicinal Chemistry

Sr. Research Chemist	11/2001 - 9/2004
Research Fellow	10/2004 - 3/2008
Sr. Research Fellow	4/2008 - Present

IV. NON-MERCK EMPLOYMENT HISTORY

V. ACADEMIC EXPERIENCE

NIH Postdoctoral Fellow	Columbia University, New York, NY	1999 - 2001
Graduate Student	Johns Hopkins University, Baltimore, MD	1994 - 1999
Undergrad. Res. Asst.	Towson State U., Towson, MD	1994
NSF-REU Fellow	University of Maryland, College Park, MD	1993

VI. TRAINING

VII. SOCIETY MEMBERSHIPS

Sigma Xi Member
American Chemical Society

VIII. ACADEMIC AND PROFESSIONAL HONORS

NIH Postdoctoral Fellowship	1999
Kilpatrick Graduate Fellowship	1998
ACS, Div. Of Organic Chem., Graduate Fellowship	1997
Ernest M. Marks Fellowship	1997
ACS, MD Section, Outstanding Student Award	1994
NSF-REU Fellowship	1993
Merck Index Achievement Award in Organic Chem.	1992

IX. PUBLICATIONS AND PATENTS

PUBLICATIONS

1. "Brazilian Baccharis Toxins: Livestock Poisoning and the Isolation of Macrocyclic Trichothecene Glucosides."
B. Jarvis, S. Wang, C. Cox, M. Rao, V. Philip, M. Varaschin, C. Barros
Natural Toxins **1996**, *4*, 58-71.
2. "Copper(II)-Catalyzed Amide Isomerization: Evidence for N-Coordination."
C. Cox, D. Ferraris, N. N. Murthy, T. Lectka
J. Am. Chem. Soc. **1996**, *118*, 5332-5333
3. "Crystal Structure and Triboluminescence 2. 9-Anthracenecarboxylic Acid and its Esters."
L. Sweeting, A. Rheingold, J. Gingerich, A. Rutter, R. Spence, C. Cox, T. Kim
Chem. Mater. **1997**, *9*, 1103-1115.
4. "Intramolecular Catalysis of Amide Isomerization."
C. Cox, V. G. Young Jr., T. Lectka
J. Am. Chem. Soc. **1997**, *119*, 2307-2308.
5. "Solvent Effects on the Barrier to Rotation in Carbamates."
C. Cox, T. Lectka
J. Org. Chem. **1998**, *63*, 2426-2427.
6. "Orthogonal" Lewis Acids: Catalyzed Ring Opening and Rearrangement of Acyl Aziridines."
D. Ferraris, W. J. Drury III, C. Cox, T. Lectka
J. Org. Chem. **1998**, *63*, 4568-4569

PUBLICATIONS (continued)

7. "Intramolecular Catalysis of Amide Isomerization: Kinetic Consequences of the 5-NH--N_H Interaction in Prolyl Peptides."
C. Cox, T. Lectka
J. Am. Chem. Soc. **1998**, 120, 10660-10668.
8. "Diastereo- and Enantioselective Alkylation of α -Imino Esters with Enol Silanes catalyzed by R-Tol-BINAP-CuClO₄⁺(MeCN)₂."
D. Ferraris, B. Young, C. Cox, W. J. Drury III, T. Dudding, T. Lectka
J. Org. Chem. **1998**, 63, 6090-6091.
9. "A Novel Synthesis of α -Amino Acid Derivatives through Catalytic Enantioselective Ene Reactions of α -Imino Esters."
W. J. Drury III, D. Ferraris, C. Cox, B. Young, T. Lectka
J. Am. Chem. Soc. **1998**, 120, 11006-11007.
10. "Strong Hydrogen Bonding to the Amide Nitrogen of an "Amide Proton Sponge": Consequences for Structure and Reactivity."
C. Cox, H. Wack, T. Lectka
Angew. Chem., Int. Ed. Engl. **1999**, 38, 798-800.
11. "Nucleophilic Catalysis of Amide Isomerization."
C. Cox, H. Wack, T. Lectka
J. Am. Chem. Soc. **1999**, 121, 7963-7964.
12. "Intramolecular Acid-Catalyzed Amide Isomerization."
C. Cox, T. Lectka
Org. Lett. **1999**, 1, 749-752.
13. "Synthetic Catalysis of Amide Isomerization."
C. Cox, T. Lectka
Acc. Chem. Res. **2000**, 33, 849-858.
14. "Synthesis of the Functionalized Tricyclic Core of Lactonamycin by Oxidative Dearomatization."
C. Cox, S. J. Danishefsky
Org. Lett. **2000**, 2, 3493-3496.
15. "Concise Synthesis of a Lactonamycin Model System by Diastereoselective Dihydroxylation of a Highly Fuctionalized Naphthoquinone."
C. Cox, S. Danishefsky
Org. Lett. **2001**, 3, 2899-2902.

PUBLICATIONS (continued)

16. "Catalytic, Enantioselective Alkylation of α -Imino Esters: The Synthesis of Nonnatural α -Amino Acid Derivatives."
D. Ferraris, B. Young, C. Cox, T. Dudding, W. Drury III, L. Ryzhkov, A. Taggi, T. Lectka
J. Am. Chem. Soc. **2002**, *124*, 67-77.
17. "Studies Directed Toward the Total Synthesis of Lactonamycin: Control of the Sense of Cycloaddition of a Quinine Through Directed Intramolecular Catalysis."
C. Cox, T. Siu, S. Danishefsky
Angew. Chem., Int. Ed. Engl. **2003**, *42*, 5625-5629.
18. "Total Synthesis of Lactonamycinone."
T. Siu, C. Cox, S. Danishefsky
Angew. Chem., Int. Ed. Engl. **2003**, *42*, 5629-5634.
19. "Two-Step Synthesis of β -Alkylchalcones and Their Use in the Synthesis of 3,5-Diaryl-5-Alkyl-4,5-Dihydropyrazoles."
C. Cox, M. Breslin, B. Mariano
Tetrahedron Lett. **2004**, *45*, 1489-1493.
20. "Kinesin Spindle Protein (KSP) Inhibitors. Part 1: The Discovery of 3,5-diaryl-4,5-dihydropyrazoles as Potent and Selective Inhibitors of the Mitotic Kinesin KSP."
C. Cox; M.J. Breslin; B.J. Mariano; P.J. Coleman; C.A. Buser; E.S. Walsh; K. Hamilton; H.E. Huber; N.E. Kohl; M. Torrent; Y. Yan; L.C. Kuo; G.D. Hartman
Bioorg. & Med. Chem. Lett. **2005**, *15*, 2041-2045.
21. "Kinesin Spindle Protein (KSP) Inhibitors. Part 4: Structure-based Design of 5-alkylamino-3,5-diaryl-4,5-dihydropyrazoles as Potent, Water-soluble Inhibitors of the Mitotic Kinesin KSP."
C. Cox; M. Torrent, M.J. Breslin; B.J. Mariano; D.B. Whitman, P.J. Coleman; C.A. Buser; E.S. Walsh; K. Hamilton; M.D. Schaber, R.B. Lobell, W. Tao, V.J. South; N.E. Kohl; Y. Yan; L.C. Kuo; T. Prueksaritanont; D.E. Slaughter; C.Li; E. Mahan; B. Lu; G.D. Hartman
Bioorg. & Med. Chem. Lett. **2006**, *16*, 3175-3179.

PUBLICATIONS (continued)

22. "Kinesin Spindle Protein (KSP) Inhibitors. Part V: Discovery of 2-Propylamino-2,4-Diaryl-2,5-Dihydropyrroles as Potent, Water-Soluble KSP Inhibitors, and Modulation of their Basicity by β -Fluorination to Overcome Cellular Efflux by P-Glycoprotein."
C. Cox; M.J. Breslin; D.B. Whitman, P.J. Coleman; R.M. Garbaccio; M.E. Fraley; M.M. Zrada; C.A. Buser; E. S. Walsh; K. Hamilton; R. B. Lobell, W. Tao; M.T. Abrams; V.J. South; H.E. Huber; N.E. Kohl, G.D. Hartman.
Bioorg. & Med. Chem. Lett. **17**, 2697-2702 (2007).
23. " Kinesin spindle protein (KSP) inhibitors. Part 6: Design and synthesis of 3,5-diaryl-4,5-dihydropyrazole amides as potent inhibitors of the mitotic kinesin KSP."
Coleman, Paul J.; Schreier, John D.; Cox, Christopher D.; Fraley, Mark E.; Garbaccio, Robert M.; Buser, Carolyn A.; Walsh, Eileen S.; Hamilton, Kelly; Lobell, Robert B.; Rickert, Keith; Tao, Weikang; Diehl, Ronald E.; South, Vicki J.; Davide, Joseph P.; Kohl, Nancy E.; Yan, Youwei; Kuo, Lawrence; Prueksaritanont, Thomayant; Li, Chunze; Mahan, Elizabeth A.; Fernandez-Metzler, Carmen; Salata, Joseph J.; Hartman, George D.
Bioorganic & Medicinal Chemistry Letters , **17**(19), 5390-5395. (2007)
24. "Kinesin Spindle Protein (KSP) Inhibitors. 9. Discovery of (2*S*)-4-(2,5-Difluorophenyl)-*N*-[3*R*,4*S*]-3-fluoro-1-methylpiperidin-4-yl)-*N*-methyl-2-phenyl-2,5-dihydro-1*H*-pyrrole-1-carboxamide (MK-0731) for the Treatment of Taxane-Refractory Cancer."
C.D. Cox, P.J. Coleman, M.J. Breslin, D.B. Whitman, R.M. Garbaccio, M.E. Fraley...Y. Yan, ...G.D. Hartman
J. Med. Chem., **51**, 4239-4252, (2008)

X. OTHER ACCOMPLISHMENTS

INVITED LECTURES

1. "Discovery of L-001154704: A Potent and Selective Inhibitor of the Mitotic Kinesin KSP".
Merck Chemistry Council Conference, La Sapiniere, Quebec - Canada
August 2004
2. "Intramolecular Catalysis of Amide Isomerization and its Role in Protein Folding".
Towson State University, Towson, MD
May 1998.

INVITED LECTURES (continued)

3. "Discovery of Kinesin Spindle Protein Inhibitor MK-0731 for the Treatment of Taxane-Refractory Cancer".
Johns Hopkins University
April 30, 2008:

PRESENTATIONS

1. "Discovery and optimization of kinesin spindle protein (KSP) inhibitors."
Cox, Christopher D.; Coleman, Paul J.; Fraley, Mark E.; Garbaccio, Robert M.; Breslin, Michael J.; Whitman, David B.; Schreier, John D.; Hartman, George D.; Torrent, Maricel; Lobell, Rob; Buser, Carolyn; Tao, Weikang; Huber, Hans; Kohl, Nancy E.; Yan, Youwei; Kuo, Lawrence C.
Abstracts of Papers, *233rd ACS National Meeting*, Chicago, IL, United States, March 25-29, 2007 (2007), MEDI-211.
2. "HTS to MK-0731: The Role of Fluorine in Optimization of Kinesin Spindle Protein (KSP) Inhibitors for the Treatment of Cancer."
Spring ACS National Meeting, April 7, 2008 (2008)
3. "Chemical Strategies to Alter P-Glycoprotein Efflux of Drug Molecules"
Spring ACS National Meeting, April 8, 2008 (2008)